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Photo- physics and Laser Chemistry

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PHYSICS AND ASTRONOMY CLASSIFICATION SCHEME (PACS)

Shortened version for use in classifying papers for Applied Physics

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 - R Laser action in solid-state lasers
 - T Free-electron lasers
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 - D Laser resonators, cavities, and amplifiers
 - E Laser beam deflection and focusing
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PHOTOPHYSICS and LASER CHEMISTRY

- Ancelet G.M., Menzies R.T., Brothers A.M.:
Frequency stabilization and transverse mode discrimination in injection-seeded unstable resonator TEA CO₂ lasers.
Appl. Phys. B 44/1, 29-35 (1987) PACS: 42.55E 42.60 42.68
- Andersson P.S., Montán S., Svanberg S.:
Remote sample characterization based on fluorescence monitoring.
Appl. Phys. B 44/1, 19-28 (1987) PACS: 07.60 07.65
- Bernegger S., Sigrist M.W.:
Longitudinal resonant spectrophone for CO-laser photoacoustic spectroscopy.
Appl. Phys. B 44/2, 125-132 (1987) PACS: 07.65 43.20 43.85
- Bloisi F., Vicari L., Cavaliere P., Martellucci S., Quartieri J., Mormile P., Pierattini G.:
Soret effect in forced Rayleigh scattering.
Appl. Phys. B 44/2, 103-106 (1987) PACS: 66.10C 42.65 78.20
- Böhm D., Moers F. von, Kändler J., Hese A.:
Angle-tuned second-harmonic generation in LiIO₃ with low losses due to index matching.
Appl. Phys. B 44/3, 189-192 (1987) PACS: 42.65C 42.70
- Bonnie R.J.M., Witterman W.J.:
High pressure X-ray preionized TEA-CO₂ laser.
Appl. Phys. B 44/1, 37-39 (1987) PACS: 42.55E 42.60
- Bourdet G.L., Muller R.A., Mullot G.M., Vinet J.Y.:
Active mode locking of a high pressure cw waveguide CO₂ laser.
Appl. Phys. B 44/2, 107-110 (1987) PACS: 42.55E 42.60
- Bruzzese R., Rendina I., Sasso A., Borsella E.:
Two-photon ionization studies of amide groups in the UV.
Appl. Phys. B 44/1, 45-50 (1987) PACS: 33.80K
- Carelli G., Ioli N., Moretti A., Pereira D., Stumia F.:
New large offset far-infrared laser lines from CD₃OH.
Appl. Phys. B 44/2, 111-117 (1987) PACS: 42.55
- Coufal H., Lee W.:
Time resolved calorimetry of Te films during pulsed laser annealing.
Appl. Phys. B 44/2, 141-146 (1987) PACS: 64.70P 68.60 78.90
- Deka B.K., Joshi R.S., Rob M.A.:
Self-focusing and defocusing of TEA CO₂ laser radiation in NH₃.
Appl. Phys. B 44/1, 1-4 (1987) PACS: 42.55E 42.60 42.65
- Dinev S.G., Stefanov I.L.:
Raman and parametric emission from excited states induced by collisions.
Appl. Phys. B 44/4, 235-240 (1987) PACS: 42.60 42.65
- Epperlein D., Dick B., Marowsky G., Reider G.A.:
Second-harmonic generation in centro-symmetric media.
Appl. Phys. B 44/1, 5-10 (1987) PACS: 42.65
- Felderhof B.U., Marowsky G.:
Electromagnetic radiation from a polarization sheet located at an interface between two media.
Appl. Phys. B 44/1, 11-17 (1987) PACS: 42.65 78.65
- Feldmann D., Kutzner J., Laukemper J., MacRobert S., Welge K.H.:
Mass spectroscopic studies of the ArF-laser photoablation of polystyrene.
Appl. Phys. B 44/2, 81-85 (1987) PACS: 79.20D 82.80
- Gale M.G., Ranson P., Denariez-Roberge M.:
Coherent spectroscopy with a distributed feedback dye laser.
Appl. Phys. B 44/4, 221-233 (1987) PACS: 42.60 42.65 78.30
- Gericke V., Hertel P., Krätzig E., Nisius J.P., Sommerfeldt R.:
Light-induced refractive index changes in LiNbO₃:Ti waveguides.
Appl. Phys. B 44/3, 155-162 (1987) PACS: 42.40 42.82 78.20
- Habfast C., Poth H., Seligmann B., Wolf A., Berger J., Blatt P., Hauck P., Meyer W., Neumann R.:
Measurement of laser light Thompson-scattered from a cooling electron beam.
Appl. Phys. B 44/2, 87-92 (1987) PACS: 41.80E 52.25 29.15
- Haug A.:
Relations between the T₀-values of bulk and quantum-well GaAs.
Appl. Phys. B 44/3, 151-153 (1987) PACS: 42.55P
- Hertel P., Menzler H.P.:
Improved inverse WKB procedure to reconstruct refractive index profiles of dielectric planar waveguides.
Appl. Phys. B 44/2, 75-80 (1987) PACS: 42.80 42.82
- Heuer W., Franke H.:
Characterization of polymer strip waveguides by leaky-mode spectroscopy.
Appl. Phys. B 44/3, 185-188 (1987) PACS: 42.30 42.80 82.50
- Huang Z.G., Shan H.Y., Huo Y., Wang H.:
A gold-vapor laser using Ne-H₂ as buffer gas.
Appl. Phys. B 44/1, 57-59 (1987) PACS: 42.55H 42.60
- Kadono H., Asakura T., Takai N.:
Roughness and correlation-length determination of rough-surface objects using the speckle contrast.
Appl. Phys. B 44/3, 167-173 (1987) PACS: 06.00 07.60 42.20
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Femtosecond uv excimer laser ablation.
Appl. Phys. B 44/4, 199-204 (1987) PACS: 42.60 82.65
- Leupacher W., Penzkofer A., Runde B., Drexhage K.H.:
Efficient phase-matched third harmonic light generation in hexafluoroisopropanol solutions of a pyrimidonecarbocyanine dye.
Appl. Phys. B 44/2, 133-140 (1987) PACS: 42.65C 42.55 78.20
- Lu C.-z., Clyne M.A.A.:
Quantum-resolved fluorescence excitation spectra of SnO free radical.
Appl. Phys. B 44/2, 99-102 (1987) PACS: 33.00 36.00
- Lusty M.E., Dunn M.H.:
Refractive indices and thermo-optical properties of dye laser solvents.
Appl. Phys. B 44/3, 193-198 (1987) PACS: 42.55M 42.65
- Maruyama Y., Suzuki Y., Arisawa T., Shiba K.:
Laser isotope separation of titanium by two-step photoionization.
Appl. Phys. B 44/3, 163-166 (1987) PACS: 32.80F
- Matsumoto H.:
The refractivity of CO₂ gas in the region of 10 μ m.
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Bisection algorithm to calculate hybrid modes of birefringent planar graded index waveguides.
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Endoergic and resonant charge transfer excitation in He-Cu discharge.
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- Okada T., Nishigoori T., Kajiyama Y., Maeda M.:
LIF diagnostics of C₂ radical behaviour in a laser CVD environment.
Appl. Phys. B 44/3, 175-179 (1987) PACS: 32.50 82.30 82.50
- Pereira D., Scalabrin A.:
Measurement and assignment of new FIR laser lines in ¹²CH₃OH and ¹³CH₃OH.
Appl. Phys. B 44/1, 67-69 (1987) PACS: 33.00 42.55
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Self-pulsing and bichromatic emission in homogeneously broadened bidirectional ring lasers.
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CO laser stabilization using the optogalvanic Lamb-dip.
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Efficient multi and single line atomic fluorine lasers.
Appl. Phys. B 44/2, 119-123 (1987) PACS: 42.55H 42.50
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Conditions for single-line and single-mode tuning of a CO₂ waveguide laser.
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- Vigant Yu.V., Kovalev A.A., Kulikov O.L., Makshantsev B.I., Pilipetskii N.F.:
On the mechanism of quartz surface crimping under laser irradiation.
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Two-photon excited parametric emission from sodium atoms.
Appl. Phys. B 44/1, 41-44 (1987) PACS: 42.65C
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Polarization bistability with a mirrorless hybrid device.
Appl. Phys. B 44/3, 181-184 (1987) PACS: 42.10 42.60 42.80

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Laser-induced helical structure in the isotropic phase of nematic liquid crystal.
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